Willow Creek Watershed IWMP Technical Review

1. Are there regions of special concern in this watershed (biologically significant, regions that may be particularly sensitive or unique)?

Fish Lake Complex – This broad water retention area consists of Crown lands containing a variety of habitats, including wetland, bog and oak – aspen forest. The wetland habitat supports waterfowl, waterbirds and furbearing animals. Significant numbers of waterfowl and waterbirds stage in the area's wetland during spring and fall migrations. The bog habitat includes artesian springs that over-winter northern leopard frogs. Also, a variety of orchid species occur in this habitat. The bog habitat is susceptible to draw downs due to drought. The oak –aspen forest supports white-tailed deer, moose, elk, black bear, wolves and coyotes, as well as birds such as ruffed grouse, sharp-tailed grouse and songbirds. The Fish Lake complex is threatened by pressure from surrounding cattle producers to reduce water levels through increased drainage activities.

Dennis Lake Complex – This wetland complex supports significant staging waterfowl and waterbirds during the spring and fall migration periods. In addition, surrounding upland forests support white-tailed deer, elk, black bears, coyotes and a wide variety of birds. Dennis Lake is threatened by pressure from surrounding cattle producers to reduce water levels through increased drainage activities.

Chatfield Deer Wintering Area – This mixed deciduous - conifer forest, located east of Chatfield, provides critical wintering habitat for a population of 1000 – 2000 white-tailed deer. While some clearing for agricultural purposes has occurred, a majority of this wintering area is secure because of its inclusion in Narcisse Wildlife Management Area. Continues gravel extraction in the northern part of Narcisse Community Pasture does threaten wooded cover that supports wintering white-tailed deer.

Clematis – Sandridge Deer Wintering Area – This aspen forest – grassland area provides critical wintering habitat for 300 – 500 white-tailed deer, as well as 25 – 50 elk. The size and suitability of the wintering habitat in this area is threatened by agricultural clearing and mining of the underlying dolomite limestone.

Willow Island Lagoon and Marsh – This wetland - lake complex supports nesting and migrating waterfowl and shorebirds, and provides important roosting habitat for waterbirds, such as American white pelicans, cormorants, gulls and terns. The beach ridge on the eastern periphery of the lagoon is used extensively by migrating songbirds. In the recent past, the endangered Piping Plover has attempted to nest on a wide exposed sand beach on the beach ridge. Human disturbance and roosting by gulls and terns has likely caused the abandonment of nesting attempts by this important shorebird. Residential development on private lands within the marsh complex threatens the diversity of habitats and wildlife in this area.

Willow Creek – The riparian zone along this creek provides habitat for white-tailed deer, furbearing animals and a wide variety of songbirds. The area's increasingly intensive agricultural development and pressure to improve drainage are potential threats to the existing natural riparian zone on this creek.

Boundary Creek - The riparian zone along this creek provides habitat for white-tailed deer, furbearing animals and a wide variety of songbirds. The riparian zone along this

creek is threatened by agricultural development, rural residential development and recreational development.

2. Are there any species of special concern in the watershed? Where is the critical habitat to support these species in the watershed? Some comments received referenced frogs and snakes and their supporting habitat. Are there any comments or previous reports you could provide that will help us to follow up on some of these questions?

The endangered Piping Plover has nested on the beach ridge at Willow Island Lagoon. This area has been designated as critical habitat under the Federal Species at Risk Act. While this critical habitat is not under immediate threat from development, it is privately owned and there is no guarantee that changes in its present undisturbed state will not occur in the future. Future use of this nesting site by Piping Plovers must be secured through limitations on the level of development on the beach ridge and restrictions on all terrain vehicle use in the area.

The least bittern, designated as threatened by the Federal Species at Risk Act, inhabits the Fish Lake complex and likely occurs in the Dennis Lake complex, although specific monitoring for this species has not occurred here. Least bitterns are attracted to areas of dense cattail and bulrush adjacent to water deep enough to support fish, which is its primary prey. The most significant threat to this species is the dramatic lowering of water levels in marshes that it inhabits. Water management on Fish Lake and Dennis Lake must ensure that water levels are sufficiently high enough to maintain the habitat preferred by Least Bitterns.

The bog area within the Fish Lake complex is a unique habitat that supports a variety of unusual and rare plant species, such as orchids, pitcher plants and sundews. In addition, the bog's extensive system of artesian springs is known to over-winter northern leopard frogs, although the extent of this use is not well understood at present. Human disturbance in the form of snowmobile and all terrain vehicle traffic is a threat to the generally pristine state of this bog.

A community of nine red-sided garter snake hibernacula exists in the Narcisse Snake Dens and surrounding Narcisse Community Pasture. These hibernacula are natural limestone sinkholes that are critical to the survival of the Narcisse red-sided garter snake population. The hibernacula within the Narcisse Snake Dens are protected from all forms of commercial development; however, the ones located in the adjacent Narcisse Community Pasture may not have the same level of protection. The Federal Agri-Environment Services Branch should be asked to assess the level of protection on lands in Narcisse Community Pasture that contain red-sided garter snake hibernacula and ensure that development that may impact this critical habitat is prohibited (i.e. limestone quarrying).

An area encompassing the east block of Narcisse Wildlife Management Area, north end of the Narcisse Community Pasture and adjacent private lands constitutes critical wintering habitat for white-tailed deer. Range monitoring has identified that white-tailed deer migrate to this habitat from as far away as fifty kilometers. Loss of this critical habitat to agricultural development in Narcisse Community Pasture and surrounding private lands would diminish the value of this area for wintering white-tailed deer.

3. What are the priority regions to protect in this watershed to protect biodiversity or species of special concern?

All of the areas listed above help to protect biodiversity and most contain species of special concern. Areas that require increased protection include the Fish Lake complex, Dennis Lake complex, Narcisse Community Pasture, Lake Winnipeg, Willow Creek and Boundary Creek riparian zones, and the willow Island Lagoon beach ridge.

4. Is habitat fragmentation an issue in the watershed? If so, can you suggest areas where connectivity should be increased?

Habitat fragmentation is an issue in the portion of the watershed east of PTH#7, where significant agricultural and rural residential development has resulted in the removal of forest cover, especially in the riparian zones along Lake Winnipeg, Willow Creek and Boundary Creek. Consideration should be given to increasing lot size requirements for new subdivision development in the area east of PTH#8. Permanent cover re-establishment in locations of severe riparian zone degradation along Willow Creek and Boundary Creek should be promoted and supported by incentive programs if required.

5.Will a management plan be developed for Camp Morton Provincial Park.

No comment. This is a Parks & Natural Areas responsibility.

6. Are there any concerns about invasive species in the watershed? Which species?

Aquatic invasive species, such as rainbow smelt, zebra mussels, rusty crayfish and curly leafed pondweed are a concern because they may invade creeks and wetlands resulting in damage to natural habitats and a decline in biodiversity. Purple loosestrife has not yet established in any significant degree in the watershed because of continued eradication efforts, however, the continued existence of this invasive species in residential gardens in the watershed is a concern. The widespread existence of red bartsia has become a significant problem because of its ability to out compete native vegetation. Continued expansion of red bartsia will over time diminish the quality of native cover and reduce wildlife habitat. The landowners and the RMs of Gimli and Armstrong must take more responsibility for the eradication of red bartsia where feasible.

Attachments: Dennis Lake / Fish Lake Resource Management Study, December 1984
Natural Resource Inventory for the Fish Lake Area in Manitoba's Interlake Region: Year 1 Report
Natural Resource Inventory for the Fish Lake Area in Manitoba's Interlake Region: Year 2 Report

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Date: December 18, 2009